



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/630,423

DATE: 08/02/2004

TIME: 11:30:27

Input Set : N:\LMOORE\PTO.LM 10630423.txt
 Output Set: N:\CRF4\08022004\J630423.raw

3 <110> APPLICANT: Chada, Kiran K.
 4 Chouinard, Roland
 5 Ashar, Hena
 6 Sayed, M.D., Abu

8 <120> TITLE OF INVENTION: METHODS OF IDENTIFYING ADIPOCYTE SPECIFIC GENES, THE GENES IDENTIFIED,

9 AND THEIR USES

11 <130> FILE REFERENCE: 69014-PRO2

C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/630,423

C--> 14 <141> CURRENT FILING DATE: 2003-07-29

16 <160> NUMBER OF SEQ ID NOS: 750

18 <170> SOFTWARE: PatentIn version 3.1

20 <210> SEQ ID NO: 1

21 <211> LENGTH: 5774

22 <212> TYPE: DNA

23 <213> ORGANISM: Mus musculus

25 <400> SEQUENCE: 1

26 catatctaaa gggattgggc gcccagacgc tgccagcgc ggtcctgctc tgagggaccc	60
---	----

28 tttaccctga ctggccagg tgactcgagc tgctgtgtca cccagagact gccacctcca	120
---	-----

30 gccccacagg ctgccatcat gtcagttca ggagatggga ccagggtccc cccaaatcc	180
--	-----

32 aaaggcaaga ctttgagcag tttcttggg tccctgcctg gcttcagctc tgcccgaaac	240
---	-----

34 ctggtgtccc acactcacag ctccacctcc acaaaggact tacaaacagc aacagacccc	300
--	-----

36 tcggggactc ctgccccctc atctaaagtg tccaccaact cacagatggc aggggatgca	360
--	-----

38 gcagggctgc tccaaaccttc tgaacagaca gctggagaca aggacatggg aagttcagt	420
--	-----

40 gtgaccagca gtgaagatgc cttctctggg gtgtttggca tcatggatgc tgcaaaagga	480
--	-----

42 atggttccagg gtggactggg tgctacccag tcggcccttg tcggaactaa ggaggcagta	540
---	-----

44 tctggagggt tgatgggagc agtggggctg gccaaaggct ttgtcaaggg aggtcttgac	600
--	-----

46 acttcaaaga atgtcctcac caatacgaag gacacagtta ccacaggat catggagct	660
--	-----

48 gcaaacatgg ccaaaggggac agtacagaca ggcctggaca ccaccaagtc tgtggcatg	720
--	-----

50 ggcactaagg acacagtggc cacaggactt gcaggggctg tgaatgtggc taaaggcacc	780
--	-----

52 atccagggtg gcctggacac caccaagtct gtggcatgg gcactaagga cacggtagcc	840
---	-----

54 acaggactca caggggctgc gaacgtggc aaagggtgtg tccagggtgg cctggacact	900
---	-----

56 accaagtctg tggcatggg caccaaggac acagtaacca caggactcac aggggcccatt	960
--	-----

58 aatgtggcta aaggcacagg gcagatgggt atagacacca gcaagactgt gctgactggc	1020
--	------

60 acaaaggaca ctgtatgtgc tggggccaca ggagccatta atgttagctaa aggggctgccc	1080
--	------

62 caaggaggcc tggacaccac caagtctgtg ctcataggca ccaaggatac ggtgaccaca	1140
--	------

64 gggctcacag gggctgtgaa cgtggctaaa ggtgctgtcc agggaggcct ggacactacc	1200
--	------

66 aagtctgtgg tcatgggcac caaggacacg gtaaccacag gactcactgg ggccatgaat	1260
--	------

68 gtggctaaag gcacagcaca gatgggtctt ggcaccagca agactgtgt gactggcaca	1320
---	------

70 aaggacactg tatgtgtgg gtcacagga gccattaatg tggctaaagg ggctgccccaa	1380
---	------

72 ggaggcctgg acaccaccaa gtctgtgtc atgggtacaa aggacacagt gaccacagg	1440
--	------

74 ctcacagggg ctgtgaacgt ggctaaaggat accatccagg gtggcctggaa caccaccaag	1500
--	------

76 tctgtggta tgggcactaa ggacacqgtg accacaggc tcacaggccc tgtgaacgtg	1560
--	------

78 gctaaaggta ccatccaggg tggcctggac accaccaagt ctgtggcat gggcactaag	1620
---	------



RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/630,423

DATE: 08/02/2004

TIME: 11:30:27

Input Set : N:\LMOORE\PTO.LM 10630423.txt
 Output Set: N:\CRF4\08022004\J630423.raw

80	gacacggta ccacaggact cacagggct gtgaacgtgg ctaaagggtgc tgcccaggga	1680
82	ggctggaca ctaccaagtgc tgggtcatg ggcaccaagg acacagtaac cacaggactc	1740
84	acagggcca tgaatgtggc taaaggcaca gcacagatgg gtcttggcac cagcaagact	1800
86	gtgctgactg gcacaaagga cactgtatgt gctggctca caggagccat taatgtggct	1860
88	aaaggggctg cccaggagg cctggacacc accaagtctg tgctcatggg tacaaaggac	1920
90	acagtgacca cagggtcac aggggctgtg aacgtggcta aaggtaccat ccagggtggc	1980
92	ctggacacca ccaagtctgt ggtcatggc actaaggaca cggtgaccac aggactcaca	2040
94	gggctgtga acgtggctaa aggtgctgtc cagggtggcc tggacactac caaatctgt	2100
96	gtcatggca ccaaggacac agtaaccaca ggactcacag gggcctgaa tgtggctaaa	2160
98	ggcacagcac agatgggtat agacaccagc aagactgtgc tgattggcac aaaggacact	2220
100	gtatgtgctg gggccacagg agccattaac atggctaaag gggctgcccaggaggectg	2280
102	gacactacca agtccgtgct catgggtaca aaggacacgg tgaccacagg actcacaggg	2340
104	gccattaacg tggctaaagg gtctgcccgggacaccacaa gtctgtgctc	2400
106	attggtacga aggacacggc gaccacaggg ctcacaggag cttgaatgt gggccaaaggaa	2460
108	acagtacaga caggtctggta tactagccag agagtgtga caggcacaaggaa ggacaatgt	2520
110	tatgctgggg tcactgggtgc agtaaatgtg gccaaaggta ccatccaggcg cggctggac	2580
112	accaccaagt ctgtggtcat gggcaactaag gacacggta ccacaggact cacagggct	2640
114	gtgaacgtgg ctaaagggtgc tggctcagggt ggcctggaca ctaccaaattc tgtggtcatg	2700
116	ggcaccaagg acacagtaac cacaggactc acagggtggca tgaatgtggc taaaggcaca	2760
118	gcacagatgg gtatagacac cagcaagact gtgctgactg gcacaaaggaa cactgtatgt	2820
120	gtctggctca caggagccat taatgttagct aaaggggctaaaggacaccaccc cctggacacc	2880
122	accaagtctg tgctcatggg tacaaaggac acgggtgacca caggactcac aggtgcccatt	2940
124	aatgttgcacca aaggggctgc ccaaggaggc ctggataccac ccaagtctgt gctcttaggt	3000
126	accaaggaca ccgtgaccac ggggctcaca gggcagcaa atgtggccaa agaaacagt	3060
128	caaattgggtc tggataccac caagaacatc ctgatggaca caaaggactc tatatgtgct	3120
130	ggggccacag gagccattac tgggtcaaa gggctgctc aaggaggct ggataattcg	3180
132	aacgcagcac tcacaggcac aatggacacg gccaaaggaa cagtgcacac aagcctggac	3240
134	accagcaagc atatgtttat aggcatgaag gacactgtct gtgctgggtt accatgtgccc	3300
136	atgaacatgg ctaaaggatgc tccataagaac acagacacca ctagagacac ccagtcttct	3360
138	gtgctggctc attcaggtaa tggatccaccc aatgcacatcc acacagggtgt tcacacagtt	3420
140	ccgagttcac tctctggctc tcatccatc atctgtcatg agcctagcat ttacagagcc	3480
142	actaaccatg gggtaggaca tggccatctg acttctacag agtccctgtg ctgtgagaca	3540
144	agcagcttct cagacaaata tggcttgggg catgtcacag agcccagagc tgacacacaa	3600
146	acccttgtgt ctggatggc ttcatctgccc tgcgcagcta ccaggtcagt ggaggagtgt	3660
148	ggtcagctgg ctggccacagg ctttgcgtca cttccctgatg agttgaaagg gctgggtgat	3720
150	atcttcagc ccatgacaaac tgaggaacaa gtcagctgg cagtcgtcaga gtcaggggccc	3780
152	cgtactct ctgtgaccg gggaaagctac tacatccgtc tgggtgaccc ggcctctagc	3840
154	ttccggccac gggccttcga acatgcccctg agccacatac agcacaacca gttccaaagcc	3900
156	agggctgcac tagccccacgt ccaggaggcc ttcccatgacatgac catggaggct	3960
158	gcatgtggga agctgtgcac tgaccagac ttgaacacca tgggtggaggc tgggttagc	4020
160	catgagatgc gggcttccgt ggtcaggac aggtgtgc acctcgccca tcagtcatt	4080
162	gcagcttaca gcagcttgc aaccaggctg cagggtgc cagagggtgca gcagcaggca	4140
164	ggcaggcac ggcacacgcct ctgcaagctg tatggcttg tggcttcggg ggcaggtagt	4200
166	gagctgcaga cagaggact gggccagac ggtgtggc tgggtggaggc ctggcaggac	4260
168	ctggagggtgc tgcttggaa gtcgcaccc aaccctccat tcagctggc ggttggaccc	4320
170	ttcacctcga tggcttggcc acagctgttag gcacccatgg gctgggtggg tgggtccca	4380
172	gggaccatgc tggaccaca gtcggctgtc cttcccaaa gtcctggatt gaacaggagc	4440
174	agaagatcct cgaaaaatgtc atttgcaccc acggccatgc ctcgttattt ctaagaacca	4500
176	atgatccctt ccctccaaac tagccacca gtcgttgc atacaggccca cacagacccc	4560

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/630,423

DATE: 08/02/2004

TIME: 11:30:27

Input Set : N:\LMOORE\PTO.LM 10630423.txt

Output Set: N:\CRF4\08022004\J630423.raw

178	cacacagagt	aaagaagcat	cacgcgtccc	caactggccag	ctttcttatcc	ttggggctct	4620
180	gacagtctt	ccagggccca	tagctttct	ctacgagtgg	tgtcaactcca	gcccgaggccc	4680
182	tactctggc	agcacaacca	cagatcttag	ctaattgacta	tgtccttggtt	ccctgggact	4740
184	agaatgcaca	gccatgcga	tgttaggctcc	tacagccgct	tctgtactt	actagggaga	4800
186	aatgctgcac	aaaaccacac	aattacattc	caggctgcta	taggcctgac	tcaggcctgc	4860
188	tctgctgaga	aaacgagagt	catatatata	tcactgcatg	gaaacagggt	tgatctgaca	4920
190	ggcccagcac	tgctgagtag	ctgtggcctg	tacaggaaca	tggctqcag	cctagggttg	4980
192	aagactgtac	tgaatgggaa	tatggcagt	tgatggttct	tctcccttgc	cttgcctac	5040
194	gcacccaaga	tagaagcaaa	caagatgctg	gggcacaagg	cactgactca	ccaccaggcc	5100
196	aaggccacag	cccagccctc	cctgaacccc	agcagtaacta	gtgaccccaa	tcttccagcc	5160
198	cctttagtctc	ttggaaaata	acaatgtcca	caagcttag	gcctgggcca	gctgtggcca	5220
200	aggaatgcca	tgatagagac	ggcaaggagc	ctttccctga	ccttctgcca	tgtcagcatc	5280
202	agggtgacac	tagaccacg	cactggcaaa	cactgggctc	agagcctgca	gctaagcttt	5340
204	ccaacagatg	gcatgagacct	cattacatca	tgccaaagtta	ttggtgtgcta	ttgaggcggg	5400
206	tggatataaac	caggaggcat	gtacccaact	cgtgagccca	ctggaaacac	agaagagtgg	5460
208	ggaagccccct	gctgaaagct	acagtgagag	ggggttgggg	ttgtgtggac	tgcaacactc	5520
210	cagccccagag	gccgagctgc	cccagaggca	ctttgtctgtt	cccacctggg	ggtccctgca	5580
212	cagctagtga	tggatttctg	ttgggttgc	cttagtgtct	gcttcactca	agctggtaga	5640
214	acaggctact	cgctgacta	agagttctgc	cagcctgtgg	gtatgagacc	tgccctgaat	5700
216	caggtctggc	tccctatact	gctcatggta	gccagcacct	aagccaataa	aagctgtttc	5760
218	tttttcatgc	ttga					5774
221	<210>	SEQ ID NO:	2				
222	<211>	LENGTH:	1413				
223	<212>	TYPE:	DNA				
224	<213>	ORGANISM:	Homo sapiens				
226	<400>	SEQUENCE:	2				
227	atggcagaac	aaaccttcag	ttctgctttt	tcaagctgctc	agtttgcaga	aaccaaggc	60
229	actgccgttc	tccgagtgtc	caagggact	gccgttctcc	acgtgtcac	gggcaccacc	120
231	gttctccatg	tactaaaggg	caccgcgtt	ctccacgtgc	tcaagggcac	cgcattctc	180
233	caggtgtca	cgggcactgc	tgttctccat	gtactaaagg	gcaccgcgt	tctccacgt	240
235	ctaaagggca	ctggcggtct	ccaggtgtt	acgggcactg	ccgtccctcca	cgtactaaag	300
237	ggcaactgccc	ttctccacgt	gctcacggc	accaccgttc	tccatgtact	aaagggcacc	360
239	gccgttctcc	acgtgtcaaa	gggcacccgc	attctccagg	tgctcacggg	caccgcgtt	420
241	ctccacgtac	taaagggcac	cggcgttctc	cacgtgtca	agggcactgc	cgttctccag	480
243	gtgctcacgg	gcactgtgt	tctccatgt	ctaaaggca	ccggcgttct	ccacgtgtc	540
245	acgggcactg	ccgttctcca	tgtactaaag	ggcaactgcag	ttcgctgcat	gctcaaggc	600
247	accggcgttc	tccatatact	aaagggcacc	gccgttctcc	acgtactaaa	ggcaactg	660
249	gttctccacg	tgctcaaggg	caccgcgtt	ctccacgtgc	tcacgggcac	tgctgttctc	720
251	catgtactaa	agggcacccgc	cgttctccag	tgctcacgg	gcactgccc	tctccatgt	780
253	ctaaagggca	ctggcggtct	ccatgtacta	aaagggcaactg	cagttcgctg	catgctcaag	840
255	ggcacccgcg	ttctccatat	actaaaggc	accqctgttc	tccaggtgt	cacgggact	900
257	gctttctcc	atgtactaaa	gggcactg	gttctccacg	tgctcaaggg	caccgcgtt	960
259	ctccagggtgc	tcacgggcac	tgccgttctc	caggtgtca	agggcaccgc	cgttctccat	1020
261	gtactaaagg	gcactgca	tctccacgt	ctcaaggc	ccggcgttct	ccaggtgtc	1080
263	acaggcactg	ccgttctcca	tgtactaaag	ggcacccgcg	ttctccatgt	actaaaggc	1140
265	actgcagttc	gctgcacgt	caagggact	gctgtctcc	actcg	tcaaa	1200
267	gctctccacg	gcttaacggc	accaccggc	tccacgt	ggtcacc	ccacc	1260
269	cacccgctca	aggtcacccgc	tgctctccac	actcaaggc	ctcaggac	ccaccgttgg	1320
271	tccttcttct	ctctccgggg	caaggc	gccccccg	tcc	tgagcacc	1380

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/630,423

DATE: 08/02/2004
TIME: 11:30:27

Input Set : N:\LMOORE\PTO.LM 10630423.txt
Output Set: N:\CRF4\08022004\J630423.raw

273 tggagcaccc tgca ^{gtgt} ga gcttgc ^{tctc} tga	1413
276 <210> SEQ ID NO: 3	
277 <211> LENGTH: 1320	
278 <212> TYPE: DNA	
279 <213> ORGANISM: Homo sapiens	
281 <400> SEQUENCE: 3	
282 atgaccgtat actgctgttag gctttataaca cactgcacac gcaggctgt ctggc ^{ttct} tg	60
284 ggaggacggt caggggccct ggc ^c tggagc tggaa ^g agg ^{gg} tgcaggacac acacagggtg	120
286 cagccagg ^{gc} c accgccc ^c tc actgcgc ^{gt} ct catggcact gccacttctc acctcta ^a ag	180
288 ggcactg ^{cc} tt tc ^t cccgagt gtc ^a agg ^{gg} actgcgc ^t tc tccacgt ^{gt} ct cacgggc ^c cc	240
290 accgttctc ^c atgtactaaa gggcac ^{cc} gc ^c gttctccac ^g tgctca ^a agg ^{gg} caccgc ^c att	300
292 ctccaggtgc tcacgggc ^a c cgc ^c gttctc ^c cacgt ^g ctca agggcac ^{cc} gt cg ^t tcc ^c ac	360
294 gtactaaagg gcaccgc ^c gt tctccacat ^g ctca ^a gg ^{gg} ca ctgcgc ^t tc ccagg ^t gctc	420
296 acgggcactg ctgttctca ^c tgta ^t actaaagg ggcac ^{cc} gc ^c gttctccac ^g tg actaaagg ^{gg} gc	480
298 actgcgc ^t tc tccagg ^t gt ^c caccggc ^a c ^t ggcgttctcc atgtactaaa gggcac ^t gca	540
300 gttcgctgca tgctca ^a agg ^{gg} caccgc ^c gt ^t ctccatatac taaagg ^{gg} ca ^c cgc ^c gttctc	600
302 cacgtactaa agg ^{gg} cact ^g tc cgttctcc ^a c ^t gtgctca ^a agg ^{gg} gcaccgc ^c gt ^t tctccagg ^t g	660
304 ctacacgggc ^a ca ctgc ^c att ^t tc ^c ccatgtacta aagg ^{gg} cact ^g cgc ^t tc ^t ca tgta ^t actaaagg	720
306 ggcact ^t g ^c ag ttcgctgcat ^t gtc ^a agg ^{gg} accgcgc ^t tc tccatatac aaagg ^{gg} cacc	780
308 gctgttctc ^c aggt ^t g ^c tac ^t gggcact ^t gt ^c gttctccat ^g tactaaagg ^{gg} cactgc ^c gtt	840
310 ctccacgtgc tca ^a gg ^{gg} ca ^c cgc ^t gttctc ^c cagg ^t g ^c tca cgggcact ^t gc cgttctcc ^a g	900
312 gtgctcaagg gcaccgc ^c gt ^t tctccat ^t g ^c ctaa ^a gg ^{gg} ca ctgcag ^t tc ccacgt ^t g ^c tc	960
314 aagg ^{gg} cac ^{cc} gc ^c gt ^t tc ^c ggtgct ^t ca ^c g ^t ggcact ^t gc ^c gttccat ^t gt actaaagg ^{gg} gc	1020
316 accgcgc ^t tc tccat ^t g ^c act ^t aaagg ^{gg} ca ^c gcatgc ^t tc ^c gcatgc ^t caa ^t gggcac ^t g ^c t	1080
318 gctctccact ^t cgttca ^a agg ^{gt} gaccgc ^c gact ^t c ^t ccacgc ^c gt taacggc ^a cc accgc ^t ctcc	1140
320 acgtgcag ^c cc agggcac ^c ac ^t cact ^t tc ^c ac ^t cgc ^t ctca ^a gg ^{gg} tcaccgc ^t gc tctccacact	1200
322 caagg ^{gg} cact ^t c ^c ag ^g acag ^c ca ^t ccgttgg ^t tc ^c ttcttctc ^t tc ^c ccggggca ^a gccaagg ^{gg} cc	1260
324 cccccgat ^t cc ^c tggggcc ^c ctg ^t gaggcac ^t ctgg ^c agcaccgt ^t gc ^c agt ^t gtgag ^t ct ^c tg ^t a	1320
327 <210> SEQ ID NO: 4	
328 <211> LENGTH: 995	
329 <212> TYPE: DNA	
330 <213> ORGANISM: Mus musculus	
332 <400> SEQUENCE: 4	
333 gcgccat ^t gg ttccgaaa ^t gt ggc ^c agc ^c g ^c tcggcaga ^a ac ^t tgctcat ^t cat ^c cggct ^t gg ^t ac ^c	60
335 atcttcc ^t cg ^c tgct ^t g ^c t ^c ca ^t ggtgtt ^c agg ^t tactcc ^t tc ^c agaag ^t ct ^t gg ^c gcacacgg ^t gt ^c	120
337 tcccggac ^c gc ^t ggc ^c ggc ^c agg ^t gtc ^t gggg ^{gg} ag ^c cgcagg ^t gc ^c gagccccca ^t ctgagg ^t cccc	180
339 agt ^t cc ^c agg ^c cctggg ^c gg ^c cgt ^t gt ^c at ^t ca ^c ggt ^t gc ^t tc ^t tg ^c tgcttctc ^t ga ^c ccagcat ^t gg ^c	240
341 agcc ^t agt ^t gc ^c ggc ^c agg ^t aat ^t ggggggt ^t ccc ^c ctgtgtt ^t ccc ^c tcgtcagagg ^t agcact ^t tg ^c cc	300
343 aagg ^t tc ^t agt ^t g ^c agggcc ^c gg ^t aggc ^c ccccca ^t gaaaag ^t gc ^c g ^t accgacaat ^t g ^c atgaagat ^t at	360
345 cagttcc ^t ttt cccagg ^c cc ^t ttgcccc ^t gt ^c cccact ^t acc ^t g ^c ggggtt ^t gg ^c gaggagg ^t gg ^c g ^t	420
347 gaagagg ^{gg} ga ^t gcaacc ^t tc ^c agat ^t at ^t gg ^c gtagg ^t cc ^c aattct ^t gt ^c at ^t cc ^t tggacc ^t aa ^c gt	480
349 cgaac ^t ag ^c ca ^t ccat ^t tc ^c gc ^c cgcaca ^t ag ^t at ^t cctaccat ^t ga ^c agat ^t cg ^c aaca ^t gccc ^t cat ^t ca ^c ac	540
351 cagcagaat ^t g ^c gacatt ^t tc ^c ga ^t catcacc ^t gc ^c tgaagg ^t cc ^c ta ^t catctcg ^t gt ^c ggtgg ^t tg ^c gag ^t	600
353 gaagagg ^{gg} tt ^c aaaaaact ^t a ^c gtggggcccc ^t cttgct ^t gccc ^c cttgc ^t c ^t at ^t g ^c gcacacat ^t at ^c	660
355 tctgc ^c ctt ^t g ^c ctccctc ^t att ^c tccc ^t tttt ^c cccccgc ^c tt ^t cggaaagg ^c cc ^t ccccaaaaat ^t g ^c	720
357 tgtca ^t ct ^t g ^c ta ^t tttggatata ^c ttcaacc ^t agt ^t aatt ^t gaat ^t cc ^c cacc ^t ttacc ^t aaaacac ^t gtt ^c	780
359 ctctaa ^c cccc ^t cggcc ^c tt ^t ca ^c ctgat ^t tt ^c gc ^t ttatcc ^t tg ^c tctcac ^t gc ^c agt ^t gt ^c tg ^t gg ^c t	840
361 caatatt ^t gt ^c gtagt ^t cg ^c ta ^t att ^t gt ^c act ^t gg ^c tttaa ^t gt ^t gt ^c catt ^t agt ^t gt ^c agt ^t ct ^c cc ^t cc ^c ag ^t	900
363 cttagatt ^t gt ^c ta ^t agct ^t c ^c t ^t g ^c ga ^t gacagg ^t ggacc ^c ac ^t tc ^c ac ^t ca ^c aaaataaaaaa ^t aatggac ^t ctc	960

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/630,423

DATE: 08/02/2004

TIME: 11:30:27

Input Set : N:\LMOORE\PTO.LM 10630423.txt

Output Set: N:\CRF4\08022004\J630423.raw

365	tcctgtcttg tagtgtccta ggaccctgca gggca	995
368	<210> SEQ ID NO: 5	
369	<211> LENGTH: 1300	
370	<212> TYPE: DNA	
371	<213> ORGANISM: Homo sapiens	
373	<400> SEQUENCE: 5	
374	taggtggcg gggggtactt aaggcqcgcc caccgcggct gcggcagtgc gccaaacagc	60
376	ggactccgag accagcggat ctccggcaaac cctctttctc gaccaccac ctaccattct	120
378	tggAACCATG gggcagtgg cggcgccctc ggctgaactg ctcatcatcg gctggtacat	180
380	cttccgcgtg ctgctgcagg tttccttggaa atgctgcatt tactggtag gattcgctt	240
382	tcgaaaatctt ccagggacac agcccattgc gagaagttagt gtgttcaggta actccctgca	300
384	gaagctggca tacacgggtg cgccgacggg gcggcagggtg ttgggggagc gcaggcagcg	360
386	agcccccaac tgaggccccca gctcccgagcc ctggggcgcc gtatcatcg gtgtcctgt	420
388	gcatctcgcc cagcacggga gccagtgcgc cgccaggatg tgggtcccc tttgtttccct	480
390	cgcaggagga gcaacttgca aggtcagtga gggggcagta gaccccccggaa gaagcagttac	540
392	cgacaatgac gaagatacca gatcccttcc caaccccttt gcaccgggtcc cactaagggg	600
394	cagggtcgag agaggagggg ggatagggggg agcagacccc tgagatctgg gcataggcac	660
396	cgcattctga tctggacaaa gtcggacag caccatccca gccccgaagc cagggccatg	720
398	ccagcaggcc ccaccatggaa aatcaaaca cccgaccaggc cagcagaatg gacattctga	780
400	catcgccagc cgacgcccgt aatcttgggtg cagcaccaac cgcgtgcctg tttgggggaa	840
402	ctggaggggca cagttgagga aggagggtgg ttaagaaata cagtggggcc ctctcgctgt	900
404	cccttgccca gggcacttgc attccagect cgctgcattt gctctctgca ttccccccttc	960
406	cttcactg cttcccaagc ccaccctact caaaaataat gtgtcacttg atttggaaact	1020
408	attcaaggcag taaaagtaaa tgaatccac ctttactaaa acactttctc tgaacccccc	1080
410	ttggccctca ctgatctgc tttccctgg tctcatgcag ttgtggtaaa tattgtggta	1140
412	atcgctaatt gtactgattt ttaagtgtg cattagttgt gtctcccaag ctagatgtta	1200
414	agctcttggaa ggacaggac cacccttaca aaaaataaaaa aaagtacctc ccctgtctcg	1260
416	cacagtgtcc caggaccctg cggtgcagta gaggcgcacc	1300
419	<210> SEQ ID NO: 6	
420	<211> LENGTH: 1102	
421	<212> TYPE: DNA	
422	<213> ORGANISM: Mus musculus	
424	<400> SEQUENCE: 6	
425	gcggactccg agaccaggtag acctcgccga acccttgctc tcgaccaccc acccacttcc	60
427	ggaaccatgg ccgcagttggc agcagccctcg gcagaactgc tcacatcggt ctggtacatc	120
429	tccgcgtgc tgctgcagggt gttcaggtac tccctgcaga agctggcgca cacgggtgtcc	180
431	cggaccgggc ggcagggtct gggggagcgc aggccaggc ccccaactg agggcccccagc	240
433	tcccaaccctt gggccggcgt gtcacatcggt gtcctgtgc ttctcgacca gcatggggagc	300
435	cagtccgcg caggaatggg gggccctcg tttccctcg tcagaggagc acttgccaag	360
437	gtcaactgttggccgttggccggtagg ccccccagaa aaggccggcacc gacaatgtatg aagatatcg	420
439	tcccttccca acccccttgc cccctgtccc actaccggcg ggtggggagq gaggggggaa	480
441	gagggggagca accctcgaga tatgggcgtt ggcaccacat tctgtatctgg accaagtccg	540
443	aacagccacca ttcaccccgcc acaagatctt accatgaaga tcgaaacagcc catcaaccag	600
445	cagaatggac attctgacat caccagctga agccctacat ctccgtgcag aagagaaagt	660
447	gtcaactgttggccgttggccggtagg gggagggtgg gggcgtgggt ggtggggagaa gaggggttaag	720
449	aaaacttagtg gggcccccctt gtccttccctt gcctatggca cacatattcc tgccttgc	780
451	cctcatttcc ctttttccccc ccgccttcga aagccctccc caaaatgtgt cacttgattt	840
453	ggatataatttcc aaccaggtaat tgaatccac ctttaccaaa acacgttctc taaccccccgg	900
455	cccttcactg atcttgccta tccctggctc cacgcagcagtttggtaaa tattgtggta	960

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/02/2004
PATENT APPLICATION: US/10/630,423 TIME: 11:30:28

Input Set : N:\LMOORE\PTO.LM 10630423.txt
Output Set: N:\CRF4\08022004\J630423.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:28; N Pos. 3366
Seq#:80; N Pos. 469,470,471,472,501
Seq#:96; N Pos. 290,411
Seq#:100; N Pos. 26,132
Seq#:110; N Pos. 36,37,38,39,40,43,48,49,50,52,53,57,58,60,61,62,63,64,65
Seq#:110; N Pos. 66,67,69,70,71,72,73,75,77,79,80,81,178
Seq#:119; N Pos. 109,114,166,274,286,287
Seq#:133; N Pos. 89,90,91,92,93,94,95,96,97,98,99,100,101,102,103,104,105
Seq#:133; N Pos. 106,107,108,109,110,111,112,113,114,115,116,117,118,119
Seq#:133; N Pos. 120,121,122,123,124,125,148,190,270,309,318,383,384,385
Seq#:133; N Pos. 387,388,390,391,392,393
Seq#:151; N Pos. 482
Seq#:153; N Pos. 148,149,150,151,152,153,154,155,156,157,158,159,160,161
Seq#:153; N Pos. 162
Seq#:203; N Pos. 56,57,58,59,60,61,62,63,64,65,66,67,68,69,70
Seq#:211; N Pos. 124,129,167,191,196,231,244,255,257,316
Seq#:236; N Pos. 228
Seq#:239; N Pos. 31,32,33,34,35,37,38,39,40,41,42,43,44,45,46,47,48,50,51
Seq#:239; N Pos. 52,53,54,55,56,57,58,60,61,62,64,66,68,70,75,79,84,86,89
Seq#:239; N Pos. 91,94,96,98,100,102,107,110,114,118,141,236
Seq#:269; N Pos. 66,168,169,170,171,172,173,174,175,176,177,178,179,180,181
Seq#:269; N Pos. 182,208,209,210,211,212,213,214,215,216,217,218,219,220
Seq#:269; N Pos. 221,222,223,224,225,226,227,228,229,247,276

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/630,423

DATE: 08/02/2004

TIME: 11:30:28

Input Set : N:\LMOORE\PTO.LM 10630423.txt

Output Set: N:\CRF4\08022004\J630423.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:2333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:3360
L:6081 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:420
L:6083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:480
L:7443 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:240
L:7447 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:360
L:7701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:0
L:7705 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:120
L:8551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:110 after pos.:0
L:8553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:110 after pos.:60
L:8555 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:110 after pos.:120
L:9236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:119 after pos.:60
L:9238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:119 after pos.:120
L:9242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:119 after pos.:240
L:10738 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133 after pos.:60
L:10740 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133 after pos.:120
L:10742 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133 after pos.:180
L:10744 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133 after pos.:240
L:10746 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133 after pos.:300
L:10748 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133 after pos.:360
L:11834 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:151 after pos.:480
L:11904 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:153 after pos.:120
L:16418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:203 after pos.:0
L:16420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:203 after pos.:60
L:16988 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:211 after pos.:120
L:16990 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:211 after pos.:180
L:16992 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:211 after pos.:240
L:16994 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:211 after pos.:300
L:18503 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:236 after pos.:180
L:18830 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:239 after pos.:0
L:18832 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:239 after pos.:60
L:18834 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:239 after pos.:120
L:18836 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:239 after pos.:180
L:21156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:269 after pos.:60
L:21158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:269 after pos.:120
L:21160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:269 after pos.:180
L:21162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:269 after pos.:240